3.11 Transportation System

Introduction

The Como Forest Health project area is located on National Forest between Rock Creek (Lake Como) and Lost Horse Creek. The project area lies approximately 4 miles north and west of Darby, Montana. The transportation analysis reviews the National Forest System road (NFSR) locations and management to determine the suitability of the road system to meet current and foreseeable future management needs.

3.11.1 History and Current Use of the Road System

The Lake Como Road (county road 8200 and portions of NFSR 550) existed prior to the creation of the Bitterroot National Forest. In January 1902, a petition for a county road up the Rock Creek drainage to Lake Como was submitted to Missoula County and accepted as a county road. The first timber sale in the history of the Forest Service was in the Lick Creek drainage in 1906. Timber was removed from the area by railroads, and the railroad grades are still visible today. The Civilian Conservation Corps constructed the Lost Horse Road (NFSR 429) between 1934 and November 1936. Many of the roads in the Lick Creek drainage were constructed in the 1950s for timber harvest and removal. Roads 5623 and 13231 were constructed under the upper Lick Creek Timber Sale between 1977 and 1978 (Figure 3.11- 1).

The main collector roads in this analysis area (NFSR 550, 5621, 429) get considerable motorized use during the year. Road 550 provides access to the Lake Como recreation area, which receives about 200,000 visitors per year. Road 550 provides access to Lake Como beach and Campground, Three Frog Campground, Rock Creek Horse Campground, Woods Cabin (rental cabin), Hikers Cabin (currently under a Special Use Permit), Rock Creek Trailhead, Little Rock Creek Trailhead and the Lake Como Dam. Road 429 provides access into Lost Horse Canyon, Schumaker Campground, Twin Lakes, Bear Creek Pass Campground and Trailhead, as well as, trails in South Lost Horse, North Lost Horse, and Bailey Lake. The Lost Horse drainage also has abundant rock climbing and bouldering opportunities. Recreational use in this area is expected to continue over the long term.

Access for recreation and timber harvest were the main reasons for road construction in the Como Forest Health project area. The project area is relatively low elevation and accessible much earlier in the spring than other road systems on the forest. Recreational driving with four-wheel drive vehicles, as well as all-terrain vehicles (ATVs), has increased in the last decade and loop roads are very popular. National Forest System roads 550, 5621, and 429 create this type of loop road opportunity that is used throughout the year. All other roads in the project area are closed yearlong except for NFSR 5623, 62966, and portions of 429. These roads are closed seasonally. Hunting season also creates motorized use on NFSR 429, 550, and 5621, as well as non-motorized use on the closed roads. We expect motorized and non-motorized uses of these roads will continue and possibly increase. Timber harvest and the need for a road system to transport logs from the forest will also continue in the project area.

The primary destinations of road system users is access to the Lake Como recreation area, wilderness trailheads, system trails, campgrounds, and other recreational opportunities in the Lost Horse Corridor. The main collector road, NFSR 5621 connects the two routes,

NFSR 429 and NFSR 550. The open and seasonally open roads are used mainly for general forest access, recreation area access, timber harvest, fire suppression, land management, hunting access, and recreational driving. The roads closed yearlong to motorized use are used for administrative access, including timber harvest, forest monitoring, and non-motorized recreational uses, such as horseback riding, mountain bike riding, and berry picking.

Traffic count data (2004) on NFSR 550 shows the Average Daily Traffic (ADT) between early June and late July is about 246 vehicles per day and vehicle use is steady during the summer season.

3.11.2 Overview of Relevant Laws, Regulations, and Policies

3.11.2.1 Bitterroot National Forest Plan

- " Forest Plan Goal for Roads (FP II-3)
 - Design transportation system and road management programs that are responsive to public concerns and protect resource goals.
- " Forest Plan Objectives for Roads (FP II-7)
 - Minimize the extent of the road system needed for resource management.
 - Minimize need for capital investment funds
 - Minimize adverse effects on water quality and fish habitat during construction and maintenance.
- Forest Plan Forest-Wide Management Standards for the Road System (FP II-27)
 - Roads will be maintained to design standards
 - Roads will be closed to public use if adequate road maintenance funds are not available.
 - All roads will be designed to facilitate reestablishment of vegetative cover on disturbed areas no to exceed 3 years, after termination of contract. If the road is necessary as a permanent addition to the National Forest transportation system, then the roadbed may not be revegetated.

Management Areas in the Como Forest Health project boundary:

The Management Area (MA) goals, designated in the Forest Plan, for the Como Forest Health project area Section 1.8 (Figure 1.8-1).

3.11.3 Existing Condition of the Affected Environment

3.11.3.1 Project Area Road System

The main access from US Hwy 93 to the Como Forest Health project area are County Roads 7600 (Lost Horse Road) and 8200 (Lake Como Road). These roads connect with NFSR 429 and 550, respectively. Within the project area, there are 8.3 miles of private road and 7.17 miles of undetermined roads (Table 3.11- 1).

The Bitter Root Irrigation District (BRID) access road is a private road within the project area. Although much of the road in on National Forest, the road is maintained by BRID and is not included on the National Forest System of Roads.

Table 3.11- 1: Miles of Road by System in the Como Forest Health Project Area

| EXISTING SYSTEM | MILES | ALTS 2, | Notes |
|-------------------------------------|-------|---------|-------------------------------------|
| | | 3, 4 | |
| | | (MILES) | |
| National Forest System Roads (NFSR) | 35.73 | 39.07 | Constructed and maintained by the |
| | | | Bitterroot National Forest |
| Undetermined Roads | 7.17 | 0.00 | All of these roads are on National |
| | | | Forest System Lands |
| Ravalli County | 5.26 | 5.26 | Ravalli County jurisdiction and |
| | | | maintenance |
| Private | 8.31 | 8.31 | Private access road for Bitter Root |
| | | | Irrigation District (BRID) canal |
| Decommission – return to productive | 0.00 | 3.82 | Includes 3.47 miles Undetermined |
| land base | | | Roads and 0.35 miles of National |
| | | | Forest System Road |

Existing undetermined roads in the project area were verified and field reviewed. Some of the undetermined roads have been waterbarred and have trees up to 9" DBH growing in the road prism. Other undetermined roads have bermed entrances, intact road prisms, and require minimal work to be serviceable for timber harvest and removal. Those undetermined roads needed for future forest management would be placed back on the NFSR system; those undetermined roads not needed for future management would be decommissioned and treated as needed to return them to the productive land base.

Operational Maintenance Levels

Operational Maintenance levels are assigned to roads considering resource needs, road condition, budgets, and environmental concerns. Table 3.11- 2 shows current road mileage by maintenance level and the changes proposed in the alternatives in the Como Forest Health project area. The description of the maintenance level is taken from the Travel Routes Data Dictionary 3.1.

Table 3.11- 2: Operational Maintenance Levels in the Como Forest Health Project Area

| Maintenance Level (ML) | ALT 1 (MILES) | ALTS. 2, 3, 4 (MILES) | OPERATIONAL MAINTENANCE LEVEL DESCRIPTION |
|---------------------------|----------------------------|--------------------------|--|
| ML 1 | 5.09 | 6.19 | Roads that have been placed in storage (> one year) between intermittent uses. Receive basic custodial maintenance and are closed to vehicular traffic. |
| ML 2 | 27.65 (8.31 private) | 29.90 | Roads open for use by high clearance vehicles. In the action alternatives, 0.62 miles of undetermined road remain open to public access. This does not change from existing use. |
| ML 3 | 9.58 | 9.58 | Roads are open to and maintained for travel by a prudent driver in a standard passenger car. In the action alternatives, there is no change in management. |

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| Maintenance | ALT 1 | ALTS. 2, 3, 4 | OPERATIONAL MAINTENANCE LEVEL DESCRIPTION |
|----------------|---------|---------------|--|
| LEVEL (ML) | (MILES) | (MILES) | |
| ML 5 | 6.97 | 6.97 | Roads provide a high degree of user comfort and |
| | (5.26 | (5.26 | convenience. In the action alternatives, there is no |
| | County) | County) | change in management. |
| ML NA - | 7.17 | 0.00 | Roads that do not currently have an Operational |
| Undetermined | | | Maintenance Level, known to exist within the |
| roads miles | | | project area. |
| ML NA | 0.00 | 3.82 | Previously Undermined roads no longer needed |
| Decommissioned | | | for future management, decommission and |
| | | | return to the productive land base |

Existing Access Travel Management

Existing access travel management in the project area ranges from open yearlong to street legal motorized vehicles to closed yearlong to all motorized uses (Figure 3.11- 1). Current travel management under the alternatives in the Como Forest Health project area is shown in Table 3.11- 3.

Table 3.11- 3: Travel Management in the Como Forest Health Project Area.

| CURRENT TRAVEL MANAGEMENT | ALT 1 | ALTS. 2, 3, | Notes |
|---|---------|-------------|---|
| | (MILES) | 4 (MILES) | |
| No Restriction, Open Yearlong to street legal motorized | 18.31 | 18.73 | NFSR: 13.05 mi, County: 5.26 mi. In alts 2, 3, 4, an additional 0.62 miles from previously Undetermined Roads, -0.20 miles of previously open National Forest System Roads |
| Open Undetermined Roads* | 0.62 | 0 | Access dispersed campsites and Lost Horse feeder ditch. In Alts 2, 3, and 4 added to open National Forest System Roads |
| Closed yearlong, Undetermined roads* | 6.54 | 0 | These roads are connected to roads with yearlong restrictions to all motorized uses. In alts 2, 3, and 4, 3.47 miles are decommissioned, 3.07 added to system roads, closed yearlong. |
| Closed yearlong, Private roads | 8.31 | 8.31 | Bitter Root Irrigation Ditch Road |
| R-1: Closed yearlong to all motorized (NFSR) | 18.06 | 20.99 | Includes 3.07 miles of previously undetermined road, +0.20 miles of previously Open National Forest System Road, -0.35 miles National Forest System Roads to be decommissioned |
| R-5: Closed Seasonally to all motorized uses(8/31 to 6/15) | 3.75 | 3.75 | No change to existing travel management |
| R-11: Closed yearlong to vehicles >50", open seasonally to vehicles <50" (8/31 to 6/15) | 0.86 | 0.86 | No change to existing travel management |

^{*}there are 7.17 miles of Undetermined Roads in the project area, 0.62 miles are currently open, 6.54 miles are access via roads closed yearlong to motorized travel

3.11-4

3.11.3.2 Desired Condition

The desired condition in the project area is to identify a National Forest System of Roads in the project area needed for the current and future management of National Forest. Recommendations regarding the future need of undetermined and National Forest System Roads in the project area are made. The proposal for classifying undetermined roads is to the same in all action alternatives.

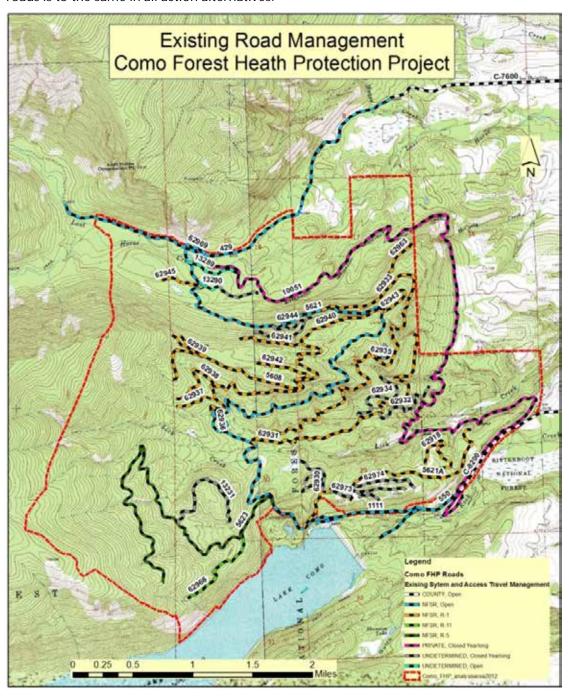


Figure 3.11- 1: National Forest Service Transportation System in the Como Forest Health Project Area. The map shows the existing road system access travel management in the project area.

3.11.4 Actions Common to All Action Alternatives

3.11.4.1 Disposition of Undetermined Roads

The Interdisciplinary Team (ID Team) reviewed the National Forest road system and undetermined roads and their utility for managing the resources in the project area. Their recommendations for adding undetermined roads to the system, and decommissioning system and undetermined roads are included in the alternatives (Table 3.11- 4). The recommendations are the same for all the alternatives, except Alternative 1. Of the 7.17 miles of undetermined roads in the project area, 3.47 miles would be decommissioned and returned back to the productive land base, and 3.70 miles would be added to the National Forest System of Roads. Treatments associated with decommissioning roads are described in the Soils and Watershed sections.

Table 3.11- 4: Existing Roads by System

| PROPOSED SYSTEM | MILES | Notes |
|------------------------------|-------|---|
| National Forest System Roads | 39.07 | The new total reflects the addition of 3.70 miles of |
| | | undetermined road, and the subtraction 0.35 miles of |
| | | NFSR miles to be decommissioned |
| Decommission - roads not | 3.82 | Includes 0.35 NFSR miles, and 3.47 miles of |
| needed for future | | undetermined road |
| management | | |
| Ravalli County | 5.26 | Existing County Roads 7600 and 8200 |
| Private | 8.31 | Private access road for Bitter Root Irrigation District |
| | | Canal |

3.11.4.2 Road Maintenance

NFSR 429 and NFSR 5621 are high priority roads for maintenance because of the high amount of use they receive. The Como Forest Health project area is a popular recreation location due to its proximity to towns, low elevation, and accessibility. Forest road crews blade and shape roads for drainage, clean ditch-lines and culverts, replace or install culverts, fix cut and fill slope failures, clear roads of blowdown, place improved aggregate surfacing, and perform other work as needed.

3.11.4.3 Proposed Access Travel Management

Proposed access travel management in the project area range from open yearlong to street legal motorized, to closed yearlong to all motorized uses. Table 3.11- 3 illustrates the proposed travel management of existing project roads in the action alternatives. About 3.08 miles of road added onto the road system would be stored and closed yearlong to motorized travel. The remaining 0.62 miles of road added to the road system would be open to motorized use. Travel management in the Como Forest Health project area does not change from the existing travel management under the project alternatives. Changes in mileages by travel management category reflect the addition of roads to the National Forest road system. Roads added to the system and closed yearlong are currently accessed from road systems that are closed yearlong. Roads added to the system as open roads are currently accessed from open roads and available for motorized use. Undetermined roads proposed for decommissioning are on closed road systems, vegetated, and show no signs of recent use.

3.11.4.4 Project Mitigations for Roads

NFSR 5621, Lick Creek Road, will receive improved aggregate surfacing at crossing locations. In addition, ditches that have the potential to contribute sediment to Lick Creek or its tributaries will be lined with rock.

NFSR 62936 is currently an open road accessing the Lick Creek pit. This location is a known TMDL sediment source in the impaired Lick Creek drainage. The proposed mitigation would improve the road drainage, place it in storage, and close it to yearlong motorized travel.

3.11.5 Environmental Consequences

3.11.5.1 4.8.5.1 Alternative 1 – No Action

Direct Effects and Indirect Effects

Alternative 1 does not identify the minimum transportation system needed for current or future management of National Forest System lands in the project area. There would be no change to the transportation system under Alternative 1 (see Existing Condition).

3.11.5.2 Alternative 2 – Proposed Action

New road construction to access timber is analyzed in Alternatives 2 and 4 (Table 3.11-5). All of the newly constructed roads would be added to the National Forest System of Roads, used for implementation of the Como Forest Health project. The locations of these proposed system roads are shown on the alternative maps (Chapter 2) and their effects discussed in the relevant resource analyses.

| , | | , | | |
|---------------------------------|-------|-------|-------|-------|
| PROPOSED SYSTEM | ALT 1 | ALT 2 | ALT 3 | ALT 4 |
| Proposed NFSR construction | 0.00 | 2.10 | 0.00 | 0.99 |
| NFSR decommission | 0.00 | -0.35 | -0.35 | -0.35 |
| Undetermined road added to NFSR | 0.00 | 3.70 | 3.70 | 3.70 |
| Total NFSR | 35.73 | 41.18 | 39.08 | 40.07 |

Table 3.11- 5: Proposed Road Construction by Alternative

Alternative 2 proposes about 2.1 miles of road construction. The extent of the National Forest road system would increase by 5.45 miles (Table 3.11- 5) by the addition of 2.10 miles of newly constructed road and 3.70 miles of undetermined roads to the National Forest System, minus decommissioning 0.35 miles of National Forest System Road. Three units in the project area need new road construction to access and treat them or adjacent units. The proposed road through Unit 53 would access the BRID canal road. Table 3.11-6 shows miles and costs of road construction needed in Alternatives 2 and 4 to access and treat the units.

A major factor in road construction cost estimates is the steepness of the ground the road traverses. As side-slopes become steeper, road construction costs increase. Road construction on steeper side slopes increases the amount of disturbed area and material that needs to be moved to build the road. On gentle to moderate side slopes, a balanced cut-and-fill design can be utilized for road construction. The minimum amount of material to be moved from undisturbed native to compacted structural fill is required. In areas where side slopes exceed 60%, the design is full-bench construction, which means all

3.11-7

excavated material to construct the roadway has to be end-hauled to a suitable location and deposited in an appropriate manner.

| Unit | ALT. 2 (MI) | TOTAL EST. COST (\$) | ALT. 4 (MI) | TOTAL EST. COST (\$) | Notes |
|-------|----------------|-----------------------|----------------|----------------------|---|
| 41 | 0.99 | 83,520 | 0 | 0 | New road construction from road 62942, end haul 13,000 CY |
| 41 | 0.11 | 3,190 | 0 | 0 | Extend road 62925 |
| 50 | 0.39 | 8,120 | 0.39 | 8,120 | New road accessing existing plantation in Unit 50 |
| 53 | 0.59 | 17,110 | 0.59 | 17,110 | New road accessing BRID road 10051 near siphon |
| Total | 2.10 | 111,940 | 0.99 | 25,230 | |

Table 3.11- 6: Miles and Costs of Road Construction Needed in Alternatives 2 and 4.

For access to unit 41, two separate sections of new construction were analyzed. The extension of NFSR 62925 would access the upper end of the unit. Side-slopes in this area are gentle, 30% or less.

The other section of NFS road would begin from NFSR 62942. The side-slopes in this area are gentle, 15 to 30% on average, for the first 0.47 miles of road. Costs associated with this construction are estimated to be within the regional average. The second section of this road would be a mid-slope road, bisecting the unit on the grade break between tractor and skyline logging systems slope standards. Road construction costs dramatically increase on the second portion of road. Side slopes are 60 to 65% on average, and require all excavated material be end-hauled to a suitable "waste" area.

The access to unit 50 is from NFSR 62945. The far half of NFSR 62945 is proposed for decommissioning to protect wetlands and water resources. An alternative route is analyzed for construction in Alternative 2 and 4. The proposed relocation would move the roadway from a pond and wetland location. The side-slopes in the area are gentle to moderate and do not exceed 30%. Road construction cost estimates are within the regional average.

There is no current access to unit 53 or National Forest east of the Lost Horse Feeder ditch that was acquired in a 2004 land exchange. The proposed access to unit 50 would be new road construction from NFSR 62931. The road would access private road 10051, the BRID access road, near the existing siphon on the Lost Horse Feeder ditch. The Forest Service does not currently have legal access to lands on the east side of the Lost Horse Feeder ditch, and attempts to secure access to private road 10051 through private lands adjacent to the project area failed. The BRID signed a temporary road use agreement that allows the Forest Service to use private road 10051 for the Como Forest Health Project. Construction of the new section of road in the proposed location would secure access to private road 10051 without needing to build a bridge across the Lost Horse ditch, or cross private land.

The road prism design for all newly constructed roads would be out-sloped for drainage, have no inter-visible turnouts, 14 ft. minimum road widths, and curve widening, as needed. Culverts would be placed in drainages. Standard BMP practices would be

incorporated into road design and construction. No roads would be constructed in riparian habitat conservation areas (RHCA).

Three of the roads proposed for construction in Alternative 2 would be managed as Operational Maintenance Level 1, closed yearlong to all motorized travel, upon completion of the project. The proposed road construction to access unit 53 would be managed as a ML 2 road, closed yearlong to public motorized travel, but available to Forest Service administrative motorized access.

One of the roads proposed for construction in Alternative 4 accessing unit 50 would be managed as Operational Maintenance Level 1, closed yearlong to motorized travel. The proposed road construction to access unit 53 would be managed as a ML 2 road, closed yearlong to public motorized travel, but available to Forest Service administrative motorized access.

Road reconstruction is proposed on three roads for Alternative 2 Table 3.11-7). Reconstruction activities will include road prism reshaping and reconstruction, surface drainage improvements, clearing and grubbing where needed, and roadside brushing.

Table 3.11- 7: Miles of Road Reconstruction in Alternatives 2, 3, and 4 in the Como Forest Health Project Area

| ROAD No. | ALT. 2 & 3 LENGTH (MI) | Est. Cost (\$) | ALT. 4 LENGTH (MI) | EST. COST (\$) | Notes |
|-------------|------------------------------|----------------------|--------------------------|-------------------|--|
| 62942 | 0.11 | 354 | 0.00 | 0.00 | Road Prism Reconstruction, clear and grub ROW |
| 62944 | 0.31 | 3,192 | 0.31 | 3,192 | Road Prism Reconstruction, clear and grub ROW |
| 62945 | 0.21 | 7,990 | 0.21 | 7,990 | Road Prism Reconstruction, pit run placement, brushing |
| 62966 | 0.90 | 4,375 | 0.45 | 2,085 | Road Prism Reconstruction, brushing |
| Total | 1.42 | 15,911 | 0.97 | 13,267 | |

A number of haul routes in the Como Forest Health project area would receive standard T-specification maintenance during project implementation (Table 3.11-8). The general maintenance work may include road grading, ditch and culvert cleaning, brushing, barricade and water bar removal and re-installation. The required activities depend on individual road features and field conditions.

Table 3.11-8: Alternative 2 Haul Routes

| Road | ALT. 2 | ALT. 3 | ALT.4 | MAINTENANCE ACTIVITIES |
|-------|--------|--------|--------|--|
| No. | LENGTH | LENGTH | LENGTH | |
| | (MI) | (MI) | (MI) | |
| 429 | 4.80 | 2.40 | 4.80 | Road surface maintenance |
| 5608 | 2.76 | 2.76 | 2.76 | Road surface maintenance, brushing |
| 5621 | 6.60 | 7.15 | 7.15 | Road surface maintenance |
| 5621a | 1.90 | 1.90 | 1.90 | Road surface maintenance, brushing |
| 5623 | 3.80 | 3.80 | 3.80 | Road surface maintenance, brushing, drain dip installation |
| 13231 | 1.10 | 1.10 | 1.10 | Road surface maintenance, brushing, drain dip installation |
| 13290 | 6.60 | 0.23 | 6.60 | Road surface maintenance, |

| Road No. | ALT. 2 LENGTH (MI) | ALT. 3 LENGTH (MI) | Alt.4 Length (MI) | Maintenance Activities |
|-------------|--------------------------|--------------------------|-------------------------|--|
| 62925 | 0.21 | N/A | N/A | Barricade removal/re-installation, road surface maintenance, brushing |
| 62930 | 0.45 | 0.45 | 0.45 | Barricade removal/re-installation, road surface maintenance, brushing, drain dip installation |
| 62931 | 4.28 | 2.31 | 2.31 | Road surface maintenance, brushing, drain dip installation |
| 62932 | 0.45 | 0.63 | 0.63 | Barricade removal/re-installation road surface maintenance, brushing, drain dip installation |
| 62933 | 2.41 | 3.90 | 3.90 | Barricade removal/re-installation, road surface maintenance, brushing, drain dip installation |
| 62934 | N/A | 0.38 | 0.38 | Road surface maintenance, brushing |
| 62937 | 0.37 | 0.37 | 0.37 | Barricade removal/re-installation, road surface maintenance, brushing |
| 62940 | 0.12 | 1.69 | 1.69 | Road surface maintenance, brushing |
| 62941 | N/A | 0.55 | 0.55 | Road surface maintenance, brushing |
| 62942 | 0.29 | N/A | 0.29 | Barricade removal/re-installation, road surface maintenance, brushing |
| 62944 | 0.39 | 0.37 | 0.37 | Road surface maintenance, brushing – this portion of road prism will also be reconstructed prior to these maintenance items being completed |
| 62945 | 0.45 | 0.38 | 0.38 | Road surface maintenance, brushing – this portion of road prism will also be reconstructed prior to these maintenance items being completed |
| 62963 | 0.60 | 0.60 | 0.60 | Barricade removal/re-installation, road surface maintenance, brushing, drain dip installation |
| 62965 | 0.23 | 0.33 | 0.33 | Barricade removal/re-installation, road surface maintenance, brushing, drain dip installation |
| 62966 | 0.90 | 0.85 | 0.90 | Barricade removal/re-installation, road surface maintenance, brushing, drain dip installation - this portion of road prism will also be reconstructed prior to these maintenance items being completed |

Direct and Indirect Effects.

Most of the roads added to the system would be ML-1. The maintenance cost of these roads would be minimal to non-existent once the roads are stored due to improved hydrologic function of road prism after road storage treatments and the yearlong restriction on motorized use. ML 1 or 2 roads, when needed for administrative use such as a timber sale, receive a higher degree of maintenance, depending on the condition of each individual road. This work may include surface grading, slump removal, brushing, clearing, drainage improvement, culvert installation, and spot surfacing. The maintenance level may be increased during administrative use. The costs associated with the higher degree of maintenance are absorbed by the timber sale and not the annual road maintenance budget. Once the administrative activities are accomplished, these roads would return to ML 1.

Illegal motorized use on ML-1 roads may increase following project implementation. However, the appearance of the roads would be minimized (Table 2.2-5) and road patrols would be increased (Table 2.2-6)

3.11.5.3 Alternative 3 – No New Roads

Direct and Indirect Effects

No new roads would be constructed in Alternative 3. However, the extent of the National Forest road system would increase by 3.35 miles (Table 3.11- 5) by the addition of 3.70 miles of undetermined roads to the National Forest System, minus decommissioning 0.35 miles of National Forest System Road.

Most of the roads added to the system would be ML-1. The maintenance cost of these roads would be minimal to non-existent once the roads are stored due to improved hydrologic function of road prism after road storage treatments and the yearlong restriction on motorized use.

Road reconstruction is proposed on three roads in Alternative 3 (Table 3.11-7) as in Alternative 2. Reconstruction activities will include road prism reshaping and reconstruction, surface drainage improvements, clearing and grubbing where needed, and roadside brushing.

Several haul routes in the project area will receive standard T-specification maintenance during implementation of the project (Table 3.11-8). The general maintenance work may include road grading, ditch and culvert cleaning, brushing, barricade and water bar removal and re-installation. The activities required will be dependent upon individual road features and field conditions.

3.11.5.4 Alternative 4 – Proposed Action

Direct and Indirect Effects

Under Alternative 4, 0.99 mile of National Forest system road would be constructed. The extent of the National Forest road system would increase by 4.34 miles Table 3.11- 4) by the addition of 0.99 miles of newly constructed road, the addition of 3.70 miles undetermined roads to the National Forest System, minus the decommissioning of 0.35 mile of system road.

Most of the roads added to the system would be ML-1. The maintenance cost of these roads would be minimal to non-existent once the roads are stored due to improved hydrologic function of road prism after road storage treatments and the yearlong restriction on motorized use.

Road reconstruction is proposed on three roads in Alternative 4 (Table 3.11-7), slightly less that in Alternatives 2 and 3. In Alt 4, the second half of NFSR 62966 is not needed for project implementation so only the first half of the road would be reconstructed. Reconstruction activities will include road prism reshaping and reconstruction, surface drainage improvements, clearing and grubbing where needed, and roadside brushing.

Several haul routes in the project area will receive standard T-specification maintenance during implementation of the project (Table 3.11-8). The general maintenance work may include road grading, ditch and culvert cleaning, brushing, barricade and water bar removal and re-installation. The activities required will be dependent upon individual road features and field conditions.

Design Features and Mitigation Measures

Standard BMP practices would be incorporated into road design and construction (Table 2.2-5, Table 2.2-6).

3.11.5.5 Compliance with Forest Plan

Roads will be maintained to design standards after completion of the Como Forest Health project. All newly constructed roads will be added to the NFSR system as Operational Maintenance Level 1 roads and closed yearlong to motorized travel.

Roads will be closed to public use if adequate road maintenance funds are not available. Most of the added miles of National Forest system roads (newly constructed and undermined) will be closed yearlong to motorize travel and hydrologically stabilized and placed into long-term storage. Hydrologically stabilizing these roads, and placing them into long-term storage upon project completion, minimizes maintenance needs between administrative uses.

All roads will be designed to facilitate revegetation of disturbed areas within three years after contract termination. All disturbed areas associated with road construction will be revegetated as part of the construction package. Roadbeds of system roads may not be revegetated.

All alternatives comply with Bitterroot National Forest Plan direction.